

## Recommendation Summary for 2020– 2021 Biennium for SRRTTF Activities in Ecology Grant Agreement

At the June 26, 2019 SRRTTF meeting, the Technical Track Work Group (TTWG) presented a list of tasks to be considered for the FY 2020-2021 ACE-SRRTTF contract with Ecology. The Task Force approved moving forward on two tasks that were supported with SRSP funding:

- Support for expanding the scope of Ecology’s 2019 Biofilm Assessment project (\$12,000)
- Preparation of a QAPP for multimedia sampling and analysis in coordination with the 2019 Biofilm Assessment project (\$8000)

The Task Force approved five other tasks contingent upon having an agreement in place in time to do the work:

- Water quality monitoring for biofilm (\$28,000)
- Groundwater seep monitoring (\$8000)
- Sediment sampling (\$11,000)
- Water quality monitoring for mass balance during high flows (synoptic sampling) (\$35,000)
- Data processing and reporting (\$13,000)

**Commented [BF1]:** Note: This task was originally budgeted at \$11,000 but Ecology EAP staff in subsequent discussions noted an error in the cost estimate had been made and the budget for this effort should be adjusted to \$17,000, as provided in the Recommendation Budget.

Other tasks presented at the Task Force meeting included:

- Additional review of known contaminated sites
- Historical information search to identify potential source locations
- Focus on identifying and removing unknown sources
- Design and establish a long-term monitoring program/network to set baseline and track concentrations in fish and water (sediment and biofilm)
- Tell more detailed story about reducing PCBs/measuring progress made
- Conduct additional R&D on emerging technologies

The TTWG reviewed these tasks and other options to create a recommended list of tasks (scope, schedule, and budget) for inclusion in the Ecology contract. Some of these tasks were combined and included in this recommendation. Others are deferred for future consideration by the Task Force.

To develop the recommendation, tasks were identified and then included in various combinations and options based on several input factors:

- Available Scopes and Budgets for Projects
- Output From the PCB Workshop
- Available Funding as Provided by the Legislature and related constraints
- Input from the Task Force’s Technical Consultant – LimnoTech

- Consideration of Technical and Non-Technical Task Force Project Needs

The TTWG considered technical tasks commonly identified as important from the breakout sessions at the PCB Workshop, along with non-technical education and outreach activities. The three options that were identified are discussed below, followed by the summary recommendation with budget. Table 1 provides a cross-walk of tasks carried forward or not carried forward in the recommendation. Associated budgets for the three options are provided in Attachment 1.

Table 1

	Option A	Option B	Option C	Recommendation
Task	Description			
	Provide Support for Expanding the Scope of Ecology's Environmental Assessment Program's (EAP's) 2019 Biofilm Assessment for the Spokane River			
1	Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project			
	Green Chemistry Advancement			
2	Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data			Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data (reduced scope)
3	Water Column Sampling at Higher (non-low flow) Flow Conditions			Education and Outreach Initiatives
4	Focus on Identification and Removal of Unknown Sources	Education and Outreach Initiatives		Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm
5	Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm			LimnoTech Technical Support
6	LimnoTech Technical Support			ACE Administration
7	ACE Administration			N/A

Please note that that not all the Tasks in Options A, B and C were carried forward in the recommended scope for this initial grant agreement, so the task numbering has been updated to reflect the modifications. Additional discussions with the Tech Track Work Group on the scope of the tasks not included below, and other findings from the Data Synthesis workshop will be scheduled later in 2019, and a proposed amendment with additional tasks will be formulated as a recommendation to the Task Force for future action.

#### Potential Option A

This option included tasks associated with sampling and investigations that further identify sources of PCBs. Cost estimates were provided by LimnoTech and many of these tasks had wide ranges for cost based on the potential range of scopes. In order to balance the scopes with available budget, generally mid-range estimates were used. As a result, the detailed scopes for each task would have been constrained to fit the available budget. The most significant upfront scope adjustment was made for the

2019 multimedia sampling effort, which would be conducted in coordination with Ecology's biofilm project. In early option scoping discussions by the group, it was proposed to conduct synoptic sampling in the Spokane Gage to Nine Mile reach to support a mass balance assessment to confirm groundwater loads identified in the 2018 synoptic survey, but this task was not included in Option A or the other two options. The incremental cost of the add-on synoptic sampling would have required that two other tasks related to Unidentified Sources, at a minimum, be deferred.

#### Potential Option B

This option replaces one of two tasks related to unidentified sources and with an education and outreach related task. Task budgets for two technical tasks were also adjusted, including more focused scopes with respect to sampling river water column and designing and conducting long term monitoring related to fish, water, and sediments and conducting the selected monitoring on a pilot basis.

#### Potential Option C

This option is the same as Potential Option B except the additional source identification work (Task 2) is delayed by one year, until after data collected in 2019 is gathered and analyzed. The additional funds from Task 2 were shifted to Task 5, (develop a more expanded scope for determining how best to design and conduct long term monitoring related to fish, water, and sediments; and conducting the selected monitoring on a more expanded pilot basis).

### Recommendation

The recommendation provided here is the initial basis for a grant agreement with Ecology. With Task Force approval, these tasks may be refined or modified and additional tasks may be added to the contract during FY 2020-2021 up to the \$500,000 limit.

### Statement of Work and Deliverables

This Statement of Work (SOW) describes the planned CONTRACTOR activities through June 30, 2021. The Spokane River Regional Toxics Task Force (SRRTTF) is a group of governmental agencies, private industries, environmental organizations who developed a plan to bring the Spokane River into compliance with water quality standards for polychlorinated biphenyls (PCBs). The objective of this statement of work is to identify and remove sources of PCBs in the Spokane River per the Spokane River Regional Toxics Task Force's 2016 Comprehensive Plan. Funding for this work is provided by the State General Fund.

The CONTRACTOR is leveraging funding from this contract with funding from other resources. The tasks will be completed using a combination of funding sources. Therefore if funding for this contract expires but all deliverables are not achieved, the additional funding sources will be used to complete the task and will be reported after completion. The activities funded by ECOLOGY under this contract are described below along with its corresponding budget.

Based on current understandings of scope for each task (Task 1 through Task 6), the budget for each task may need to be revised in the future. Should a scope revision for any task result in the allocated funding for that task not being fully utilized, the surplus funding will be reallocated as appropriate to other tasks. Any reallocation of budget must be mutually agreed upon between the parties.

**Task 1: Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project**

In support of SRRTTF's Comprehensive Plan Element 6.3 and using this element to guide the work to better define the pathway between source areas, delivery mechanisms, and environmental response, the CONTRACTOR in collaboration with Ecology's Environmental Assessment Program (EAP) will assure completion of the following:

- Preparation of a Quality Assurance Project Plan (QAPP) or QAPP Amendment as appropriate, that among other things, identifies the locations, frequencies, parameters, other supporting data collection, sample collection methodologies, and analytical methods for river water column samples, sediment samples, and groundwater seep samples. Focus area for this work is the Upriver Dam to Spokane Gage reach of the river
- Execute sampling events as described in the QAPP referenced above in coordination with EAP's 2019 biofilm sampling event
- Prepare report on results of analyses for each media and comparisons of the findings in each media with respect to how they may relate to each other and the EAP biofilm study results

Deliverables and Due Dates:

Copies of the following deliverables are to be provided to the ECOLOGY Contract Manager.

Deliverable	Due Date
Progress project status report(s) of Task activities and associated costs identified within conjunction with progress billings	As progress billings to be submitted no less frequently than every 4 months
QAPP for multimedia sample collection, sample analysis, and data analysis	August 15, 2019
Draft report on results of analyses for each media and comparisons of the findings in each media with respect to how they may relate to each other and the EAP biofilm study results	March 31, 2020
Data uploaded to Ecology's Environmental Information Management System (EIM)	June 30, 2020
Final report on sampling and analysis results	June 30, 2020

**Task 2: Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data**

In support of SRRTTF's Comprehensive Plan Element 5.14<sup>1</sup>, the CONTRACTOR will assure completion of the following:

- Define land uses that could have served as a source of PCB and conduct a search of historical land use records or related information to determine locations of potential sources in the vicinity of the Spokane River with a focus on specific areas adjacent to locations where 2018 and 2019 monitoring showed elevated concentrations.
- In combination with land use information, use the EAP/SRRTTF 2018 and 2019 sampling results (water column/biofilm/sediment) to consult with TCP (Comprehensive Plan Element 5.14.1.b) develop a future sampling plan to target key sites identified (Comprehensive Plan Element 5.14.1.c)

Deliverables and Due Dates:

Copies of the following deliverables are to be provided to the ECOLOGY Contract Manager.

Deliverable	Due Date
Project status reports in conjunction with progress billings	As progress billing submitted
A report documenting the review of EAP/SRRTTF 2018 and 2019 sampling results in conjunction with the review of historical land use and the identification of sites of interest for targeted sampling	February 28, 2021
Develop a targeted sampling plan based on the findings of the site identification effort	May 31, 2021

**Task 3: Education and Outreach**

In support of SRRTTF's efforts to provide public education and outreach on PCB, the CONTRACTOR will assure completion of the following:

- Conduct Spring 2020 education campaign through the Spokane River Forum
- Develop and provide a school education curriculum on PCB
- Hold a "State of the River" meeting in partnership with the Spokane River Forum

Deliverables and Due Dates:

Copies of the following deliverables are to be provided to the ECOLOGY Contract Manager.

Deliverable	Due Date
Project status reports in conjunction with progress billings	As progress billing submitted
A report documenting the content as well as any associated statistics on effectiveness for the Spring Campaign	June 30, 2020

<sup>1</sup> This effort can be considered an extension of data mining activities discussed in Comprehensive Plan Element 5.14.1.a.

A report documenting the materials developed for the "State of the River" meeting	May 31, 2021
A report documenting the materials produced and any associated statistics on effectiveness of the curriculum	May 31, 2021

**Task 4:** Design a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm

In support of SRRTTF's Comprehensive Plan Element 6.1 and 6.3, the CONTRACTOR will assure completion of the following:

- Assess methodologies and media that could be used for monitoring/tracking of concentrations and loading of PCBs
- Select the media and develop plan(s) for monitoring/tracking concentrations in PCB

Deliverables and Due Dates:

Copies of the following deliverables are to be provided to the ECOLOGY Contract Manager.

Deliverable	Due Date
Project status reports in conjunction with progress billings	As progress billing submitted
A report documenting the results of the assessment of methodologies and media for potential long-term monitoring/tracking of PCB concentrations and loading	April 30, 2020
Prepare a QAPP for conducting long-term monitoring/tracking of PCB concentrations	June 30, 2020

**Task 5:** LimnoTech Technical Support

LimnoTech is the SRRTTF's contractor for technical advice and as such participates in SRRTTF and Technical Track Work Group meetings. The SRRTTF requires LimnoTech's technical expertise to make informed decisions. In addition to directly managing technical projects such as sampling and data analysis, LimnoTech may be called upon to manage other projects that would benefit from their overall knowledge of the PCB data and information that the SRRTTF's previous work has generated. This task will help pay for analysis and information requests that arise which are outside the scope of other tasks in this contract.

- Draft and final technical memorandums will be generated as requested by the SRRTTF. The memorandums will be provided to the Contract Manager 30 days after they are completed
- Project management as needed

Deliverables and Due Dates:

Copies of the following deliverables are to be provided to the ECOLOGY Contract Manager.

Deliverable	Due Date
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Project status reports in conjunction with progress billings	As progress billing submitted
Draft and final technical memorandums generated	30 days after issuance

**Task 6: ACE Administration**

The CONTRACTOR will incur administrative costs as a result of contract requirements and contracting with third parties to carry out requirements of previously described tasks. For example, for the previously described tasks, third party preparation of requests for proposals for sampling and laboratory services will be incurred. In addition, expenses for such contract requirements for insurance will be incurred. The CONTRACTOR may seek reimbursement for these administrative expenses.

- The CONTRACTOR is responsible for entering all surface, flow, and groundwater quality data generated as a result of this contract into ECOLOGY's Environmental Information Management System.
- Facilitation services for all SRRTTF and other Work Group meetings may be funded by this contract and other sources of funding.

Deliverables and Due Dates:

<b>Recommendation</b>					
<b>Basis - June 26, 2019 Task Force Direction</b>					
		<b>Legislative Funds</b>		<b>Other TF Funding</b>	
<b>Task</b>	<b>Description</b>	<b>FY 1</b>	<b>FY 2</b>	<b>FY 1</b>	<b>FY 2</b>
	Provide Support for Expanding the Scope of Ecology's Environmental Assessment Program's (EAP's) 2019 Biofilm Assessment for the Spokane River	\$0	\$0	\$17,000	
1	Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project	\$55,000	\$0	\$8,000	
	Green Chemistry Advancement	\$0	\$0	\$25,000	
2	Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data	\$0	\$20,000		
3	Education and Outreach Initiatives	\$25,000	\$25,000		
4	Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm	\$48,000			
5	LimnoTech Technical Support	\$20,000	\$40,000	\$20,000	
6	ACE Administration	\$42,000	\$84,000	\$42,000	
	<b>Total Cost</b>	\$190,000	\$169,000	\$112,000	\$0
	Subtotal		\$359,000	\$112,000	
Uncommitted TF Funds Remaining ~ \$28, 000 ACE funding and \$141,000 State Legislature funding					



## Attachment 1

### Budget Summaries for Options A, B and C

Potential Option A					
Basis - June 26, 2019 Task Force Direction					
Task	Description	Legislative Funds		Other TF Funding	
		FY 1	FY 2	FY 1	FY 2
	Provide Support for Expanding the Scope of Ecology's Environmental Assessment Program's (EAP's) 2019 Biofilm Assessment for the Spokane River	\$0	\$0	\$17,000	
1	Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project	\$55,000	\$0	\$8,000	
	Green Chemistry Advancement	\$0	\$0	\$25,000	
2	Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data	\$15,000	\$36,000		
3	Water Column Sampling at Higher (non-low flow) Flow Conditions	\$78,000	\$0		
4	Focus on Identification and Removal of Unknown Sources	\$10,000	\$50,000		
5	Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm	\$30,000	\$40,000		
6	LimnoTech Technical Support	\$20,000	\$40,000	\$20,000	
7	ACE Administration	\$42,000	\$84,000	\$42,000	
	<b>Total Cost</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$112,000</b>	<b>\$0</b>
Uncommitted TF Funds Remaining ~ \$28, 000					

Potential Option B					
Basis - June 26, 2019 Task Force Direction					
Task	Description	Legislative Funds		Other TF Funding	
		FY 1	FY 2	FY 1	FY 2
	Provide Support for Expanding the Scope of Ecology's Environmental Assessment Program's (EAP's) 2019 Biofilm Assessment for the Spokane River	\$0	\$0	\$17,000	
1	Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project	\$55,000	\$0	\$8,000	
	Green Chemistry Advancement	\$0	\$0	\$25,000	
2	Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data	\$15,000	\$36,000		
3	Water Column Sampling at Higher (non-low flow) Flow Conditions	\$60,000	\$0		
4	Education and Outreach Initiatives	\$25,000	\$25,000		
5	Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm	\$33,000	\$65,000		
6	LimnoTech Technical Support	\$20,000	\$40,000	\$20,000	
7	ACE Administration	\$42,000	\$84,000	\$42,000	
	<b>Total Cost</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$112,000</b>	<b>\$0</b>
Uncommitted TF Funds Remaining ~ \$28, 000					

Potential Option C					
Basis - June 26, 2019 Task Force Direction					
Task	Description	Legislative Funds		Other TF Funding	
		FY 1	FY 2	FY 1	FY 2
	Provide Support for Expanding the Scope of Ecology's Environmental Assessment Program's (EAP's) 2019 Biofilm Assessment for the Spokane River	\$0	\$0	\$17,000	
1	Conduct Multimedia Sample Collection and PCB Analyses in Coordination with EAP 2019 Biofilm Sampling Project	\$55,000	\$0	\$8,000	
	Green Chemistry Advancement	\$0	\$0	\$25,000	
2	Additional Contaminated Site Investigation for Purposes of Future Identification and Removal Focusing on Historical Information and Biofilm and Sediment Data	\$0	\$20,000		
3	Water Column Sampling at Higher (non-low flow) Flow Conditions	\$60,000	\$0		
4	Education and Outreach Initiatives	\$25,000	\$25,000		
5	Design and Initiate a Long-Term Monitoring/Tracking Program for PCB Concentrations Considering Fish, Water, Sediment, and Biofilm	\$48,000	\$81,000		
6	LimnoTech Technical Support	\$20,000	\$40,000	\$20,000	
7	ACE Administration	\$42,000	\$84,000	\$42,000	
	<b>Total Cost</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$112,000</b>	<b>\$0</b>
Uncommitted TF Funds Remaining ~ \$28, 000					